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AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A <u>computer-implemented</u> method of indexing data blocks according to a collection of subject words, comprising:

constructing a N-dimensional coordinate space, wherein N is a cardinality of the collection of subject words.

2. (Original) The method of claim 1, further comprising:

traversing data block links leading to discovery of cross-subject affinities.

- 3. (Original) The method of claim 1, further comprising:
 determining a closeness of any two data blocks in said database.
- 4. (Original) The method of claim 3, wherein said determining is performed according to an equation comprising:

$$D(\mathbf{R}, \mathbf{P2}) = \sqrt{\mathbf{S}_{D}(\mathbf{R}_{D} - \mathbf{P2}_{D})^{2}}$$

where D is a data block and p1, p2 are points in the N-dimensional space and S is a summation.

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- 5. (Original) The method of claim 1, wherein affine documents are determined to be in closer proximity than non-affine documents in a mapping to N-space coordinates.
- 6. (Original) The method of claim 1, wherein all dimensions of said N-dimension coordinate space are considered.
- 7. (Original) The method of claim 1, wherein said data blocks comprise documents, said method further comprising:

building a term-by-document matrix and using all of the terms in N- dimensions in the coordinate space.

- 8. (Original) The method of claim 7, further comprising:
 utilizing a column term in the term-by-document matrix as a vector.
- 9. (Original) The method of claim 1, further comprising:

 measuring a distance function between data blocks, wherein said distance function is
 representative of an affinity between two data blocks.
- 10. (Original) The method of claim 1, further comprising: building a proximity list for each data block.
- 11. (Original) The method of claim 1, further comprising:

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navigating through data blocks based on a content of said data blocks, said navigating being performed by selectively moving from one page to another without traversing a hypertext link.

12. (Original) The method of claim 1, wherein said data blocks comprise any of Web pages, images, and database entries indexed such that each data block resides in a specific point in the N-dimensional coordinate space, and

wherein a placement of the data blocks in the coordinate space is performed such that data blocks which are relatively closer to each other are related to a same subject.

- 13. (Original) The method of claim 10, wherein the proximity list is ordered in ascending order of proximity, with a closest point being listed first.
- 14. (Original) The method of claim 10, further comprising reordering the proximity list by changing a coordinate of a current location.
- 15. (Original) The method of claim 10, wherein the proximity list is changed when a current position is changed to a position of a visited data block.
- 16. (Original) The method of claim 10, wherein a user selectively follows one of a link from a data block and follows an item in the proximity list, to navigate independently of links found in other data blocks.

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- 17. (Original) The method of claim 1, wherein said data blocks are selectively traversable by using hypertext links and by not using hypertext links.
- 18. (Canceled)
- 19. (Canceled)
- 20. (Canceled)
- 21. (Canceled)
- 22. (Currently Amended) A <u>computer-implemented</u> method for indexing a database, comprising:

constructing a coordinate system; and

mapping documents of said database into the coordinate system to determine a physical closeness of first and second documents of said database.

23. (Currently Amended) A computer system for indexing data blocks according to a collection of subject words, comprising:

a construction unit for constructing a N-dimensional coordinate space, wherein N is a cardinality of a collection of subject words.

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- 24. (Original) The system of claim 23, further comprising:

 traversing data block links leading to discovery of cross-subject affinities.
- 25. (Original) The system of claim 23, further comprising:

 a determining unit for determining a closeness of any two data blocks in said database.
- 26. (Original) The system of claim 25, wherein said determining by said determining unit is performed according to an equation comprising:

$$D(\mathbf{R},\mathbf{P}) = \sqrt{\mathbf{S}_D(\mathbf{R}_D - \mathbf{P}_D)^2}$$

where D is a data block and p1, p2 are points in the N-dimensional space and S is a summation.

- 27. The system of claim 25, wherein affine documents are determined by said determining unit to be in closer proximity than non-affine documents in a mapping to N-space coordinates.
- 28. (Original) The system of claim 23, wherein all dimensions of said N-dimension coordinate space are considered.

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29. (Original) The system of claim 23, wherein said data blocks comprise documents, said construction unit comprising:

a unit for building a term-by-document matrix and using all of the terms in N- dimensions in the coordinate space.

- 30. (Original) The system of claim 29, further comprising:

 means for utilizing a column term in the term-by-document matrix as a vector.
- 31. (Original) The system of claim 23, further comprising:

 a measuring unit for measuring a distance function between data blocks, wherein said distance function is representative of an affinity between two data blocks.
- 32. (Original) The system of claim 23, further comprising: a unit for building a proximity list for each data block.
- 33. (Original) The system of claim 23, further comprising:

a navigation unit for navigating through data blocks based on a content of said data blocks, said navigating being performed by selectively moving from one page to another without traversing a hypertext link.

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34. (Original) The system of claim 23, wherein said data blocks comprise any of Web pages, images, and database entries indexed such that each data block resides in a specific point in the N-dimensional coordinate space, and

wherein a placement of the data blocks in the coordinate space is performed such that data blocks which are relatively closer to each other are related to a same subject.

35. (Original) The system of claim 32, wherein the proximity list is ordered in ascending order of proximity, with a closest point being listed first.

36. (Original) The system of claim 32, further comprising:

a reordering unit for reordering the proximity list by changing a coordinate of a current location.

- 37. (Original) The system of claim 32, wherein the proximity list is changed when a current position is changed to a position of a visited data block.
- 38. (Original) The system of claim 32, wherein a user selectively follows one of a link from a data block and follows an item in the proximity list, to navigate independently of links found in other data blocks.
- 39. (Original) The system of claim 32, wherein said data blocks are selectively traversable by using hypertext links and by not using hypertext links.

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- 40. (Canceled)
- 41. (Canceled)
- 42. (Canceled)
- 43. (Canceled)
- 44. (Currently Amended) A computer system for indexing a database, comprising:
 - a unit for constructing a coordinate system; and
- a mapping unit for mapping documents of said database into the coordinate system to determine a physical closeness of first and second documents of said database, wherein indexing said database is performed according to a collection of subject words, such that said coordinate system comprises an N-dimensional coordinate space, wherein N is a cardinality of the collection of subject words.
- 45. (Currently Amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a computer-implemented method of indexing data blocks according to a collection of subject words, said method comprising:

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constructing a N-dimensional coordinate space, wherein N is a cardinality of a collection of subject words.

46. (Canceled)

47. (Currently Amended) A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a computer-implemented method of indexing a database, said method comprising:

constructing a coordinate system; and

mapping documents of said database into the coordinate system to determine a physical closeness of first and second documents of said database, wherein indexing said database is performed according to a collection of subject words, such that said coordinate system comprises an N-dimensional coordinate space, wherein N is a cardinality of the collection of subject words.

- 48. (New) The method of claim 1, wherein each data block represents a document and each said document is represented as a vector which has a position in the N-dimensional coordinate space of N subject words, such that a relationship is independent of any other document.
- 49. (New) The method of claim 1, wherein each data block represents a document and wherein a document can be added to the coordinate space without impacting a measurement of any other document.

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- 50. (New) The system of claim 23, wherein each data block represents a document and each said document is represented as a vector which has a position in the N-dimensional coordinate space of N subject words, such that a relationship is independent of any other document.
- 51. (New) The system of claim 23, wherein each data block represents a document and wherein a document can be added to the coordinate space without impacting a measurement of any other document.
- 52. (New) The system of claim 44, wherein each said document is represented as a vector which has a position in an N-dimensional coordinate space of N subject words, such that a relationship is independent of any other document.
- 53. (New) The system of claim 44, wherein a document can be added to the coordinate system without impacting a measurement of any other document.
- 54. (New) The medium of claim 45, wherein each data block represents a document and each said document is represented as a vector which has a position in the N-dimensional coordinate space of N subject words, such that a relationship is independent of any other document.
- 55. (New) The medium of claim 45, wherein each data block represents a document and wherein a document can be added to the coordinate space without impacting a measurement of any other document.